



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Christopher F. Claiborne, <i>et al.</i>	Art Unit: 1626	
Patent No.	7,053,089 B2		
Date:	May 30, 2006		Case No.: 20832Y
Serial No.:	10/079,452		
Filed:	February 20, 2002	Examiner: Rao, D.	
For:	N-SUBSTITUTED NONARYL-HETEROCYCLIC NMDA/NR2B ANTAGONISTS		

Attn: Certificate of Correction Branch
Commissioner for Patents
Office of Patent Publication
P.O. Box 1450
Alexandria, VA 22313-1450

REQUEST FOR CERTIFICATE OF CORRECTION

Sir:

Applicants respectfully request that a Certificate of Correction be issued in the above-captioned U.S. Patent. The request is made to correct errors made by the Patent and Trademark Office when transcribing the application. Specifically, the Examiner's attention is directed to the amendment submitted on April 29, 2004 (attached), page 3, next-to-last line, which clearly recites "aryl (CH₂)₁₋₃-NH-C(O)-" and not "aryl(CH₂)₁₋₃-, -NH-C(O)-".

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on the date appearing below.

MERCK & CO., INC.

By: J. Reynolds Date 5/1/07

Date: May 1, 2007

Respectfully submitted,

By: David Rubin
David Rubin
Registration No. 40,314
Attorney for Applicants

MERCK & CO., INC.
P.O. Box 2000 - RY 60-30
Rahway, New Jersey 07065-0907
Telephone No. (732) 594-2675
Facsimile No. (732) 594-4720

(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO: U.S. 7,053,089 B2

DATED: May 30, 2006

INVENTOR(S): Christopher F. Claiborne, John W. Butcher, David A. Claremon, Brian E. Libby, Nigel J. Liverton, Peter M. Munson, Kevin T. Nguyen, Brian Phillips, Wayne Thompson, John A. McCauley.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In column 146, line 66, should read "(O)-, aryl(CH₂)₁₋₃-NH-C(O)-, aryl".

MAILING ADDRESS OF SENDER:

David Rubin
Patent Department
Merck & Co., Inc.
P.O. Box 2000, RY60-30
Rahway, NJ 07065-0907

PATENT NO. US 7,053,089 B2
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Merck & Co., Inc.
P.O. Box 2000
Rahway, NJ 07065

Patient Department

Facsimile Cover Sheet

OFFICIAL

TODAY'S DATE: April 29, 2004**PLEASE DELIVER THE FOLLOWING MESSAGE TO:**Examiner's Name: Deepak RaoExaminer's fax number: (703) 872-9306Group number: 1624**THIS MESSAGE IS FROM:**Name: Mitul I. DesaiPhone No.: (732) 594-3190Mail Location: RY60-30Fax No.: (732) 594-4720**RE:** Applicants: Claiborne et al.Case No.: 20832YSerial No.: 10/079,452Filed: February 20, 2002Title: N-SUBSTITUTED NONARYL-HETEROCYCLIC
NMDA/NR2B ANTAGONISTS**NUMBER OF PAGES BEING TRANSMITTED (INCLUDING COVER):** 32**IF YOU DO NOT RECEIVE ALL OF THE PAGES, PLEASE CALL
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Type or print name of person signing certification

Mitul

Signature

April 29, 2004

Date

Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 2

Amendments to the Specification:

Please replace lines 9-12 on page 15 with the following amended paragraph:

HetAr is optionally substituted with 1 or 2 substituents, each substituent independently is C₁-alkyl, C₁₋₄alkoxy, C₂₋₄alkynyl, trifluoromethyl, hydroxy, hydroxyC₁₋₄alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, N(C₀₋₄alkyl)(C₀₋₄alkyl), amino, nitro, (C₁₋₂alkyl)(C₁₋₂alkyl)NCH₂-, (C₁₋₂alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-;

Please replace lines 26-29 on page 15 with the following amended paragraph:

HetAr is optionally substituted with 1 or 2 substituents, each substituent independently is C₁-alkyl, C₁₋₄alkoxy, C₂₋₄alkynyl, trifluoromethyl, hydroxy, hydroxyC₁₋₄alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, N(C₀₋₄alkyl)(C₀₋₄alkyl), amino, nitro, (C₁₋₂alkyl)(C₁₋₂alkyl)NCH₂-, (C₁₋₂alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-;

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PATENT APPLICATION FEE DETERMINATION RECORD
Effective October 1, 2001

Application or Docket Number

20332910079452

CLAIMS AS FILED - PART I

(Column 1) (Column 2)

TOTAL CLAIMS	52	
FOR	NUMBER FILED	NUMBER EXTRA
TOTAL CHARGEABLE CLAIMS	52 minus 20 =	32
INDEPENDENT CLAIMS	1 minus 3 =	4
MULTIPLE DEPENDENT CLAIM PRESENT		<input type="checkbox"/>

* If the difference in column 1 is less than zero, enter "0" in column 2

CLAIMS AS AMENDED - PART II

(Column 1) (Column 2) (Column 3)

AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	Minus	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total	152	Minus	52	=
Independent		Minus	***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM		<input type="checkbox"/>		

SMALL ENTITY
TYPE OR OTHER THAN
SMALL ENTITY

RATE	FEES	RATE	FEES
BASIC FEE	370.00	OR BASIC FEE	740.00
X\$ 9=		OR X\$18=	576
X42=		OR X84=	-
+140=		OR +280=	-
TOTAL		TOTAL	

SMALL ENTITY OR OTHER THAN
SMALL ENTITY

RATE	ADDITIONAL FEE	RATE	ADDITIONAL FEE
X\$ 9=		OR X\$18=	
X42=		OR X84=	
+140=		OR +280=	
TOTAL ADDIT. FEE		TOTAL ADDIT. FEE	

(Column 1) (Column 2) (Column 3)

AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	Minus	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total	**	Minus	**	=
Independent	***	Minus	***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM		<input type="checkbox"/>		

RATE	ADDITIONAL FEE	RATE	ADDITIONAL FEE
X\$ 9=		OR X\$18=	
X42=		OR X84=	
+140=		OR +280=	
TOTAL ADDIT. FEE		TOTAL ADDIT. FEE	

(Column 1) (Column 2) (Column 3)

AMENDMENT C	CLAIMS REMAINING AFTER AMENDMENT	Minus	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total	**	Minus	**	=
Independent	***	Minus	***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM		<input type="checkbox"/>		

RATE	ADDITIONAL FEE	RATE	ADDITIONAL FEE
X\$ 9=		OR X\$18=	
X42=		OR X84=	
+140=		OR +280=	
TOTAL ADDIT. FEE		TOTAL ADDIT. FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3."

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

10/07/01, 452

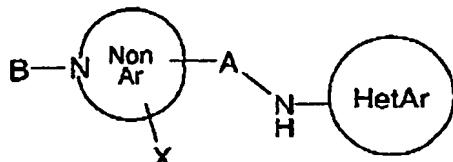
Serial No.: 10/079,452
 Case No.: 20832Y
 Page No.: 3

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1(currently amended): A compound having the formula (I):



(I)

or a pharmaceutically acceptable salt thereof, wherein

NonAr is a nonaromatic 5-7 membered ring containing 1 or 2 nitrogen ring atoms or an aza bicyclo octane ring;

HetAr is a 5 or 6 membered heteroaromatic ring containing 1-3 nitrogen ring atoms, or isoxazolyl, thiazolyl, thiadiazolyl, quinolinyl, quinazolinyl, purinyl, pteridinyl, benzimidazolyl, pyrrolopyrimidinyl, or imidazopyridinyl;

HetAr is optionally substituted with 1 or 2 substituents, each substituent independently is C₁₋₄alkyl, C₁₋₄alkoxy, C₂₋₄alkynyl, trifluoromethyl, hydroxy, hydroxyC₁₋₄alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀₋₄alkyl)(C₀₋₄alkyl), nitro, (C₁₋₂alkyl)(C₁₋₂alkyl)NCH₂-, (C₁₋₂alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-;

A is -C₁₋₄alkyl-;

B is aryl(CH₂)₀₋₃-O-C(O)-, heteroaryl(CH₂)₁₋₃-O-C(O)-, indanyl(CH₂)₀₋₃-O-C(O)-, aryl(CH₂)₁₋₃-C(O)-, aryl-cyclopropyl-C(O)-, heteroaryl-cyclopropyl-C(O)-, heteroaryl(CH₂)₁₋₃-C(O)-, [[aryl(CH₂)₁₋₃-,]] [[heteroaryl(CH₂)₁₋₃-,]] aryl(CH₂)₁₋₃-NH-C(O)-, aryl(CH₂)₁₋₃-NH-C(NCN)-, aryl(CH₂)₁₋₃-SO₂-, heteroaryl(CH₂)₁₋₃-SO₂-, wherein any of the

Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 4

aryl or heteroaryl is optionally substituted by 1-5 substituents, each substituent independently is C₁₋₄alkyl, C₃₋₆cycloalkyl, C₁₋₄alkoxy, trifluoromethyl, bromo, fluoro, or chloro; and

X is H, OH, F, C₁₋₄alkyl, C₁₋₄alkoxy, NH₂, or X taken with an adjacent bond is =O.

Claim 2(previously presented): The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein

NonAr is a nonaromatic 6 membered ring containing 1 nitrogen ring atom; and B is aryl(CH₂)₀₋₃-O-C(O)-, wherein the aryl is optionally substituted by 1-5 substituents, each substituent independently is C₁₋₄alkyl, C₃₋₆cycloalkyl, C₁₋₄alkoxy, trifluoromethyl, bromo, fluoro, or chloro.

Claim 3(previously presented): The compound according to Claim 2, or a pharmaceutically acceptable salt thereof, wherein

HetAr is a 6 membered heteroaromatic ring containing 1 nitrogen ring atom; HetAr is optionally substituted with 1 or 2 substituents, each substituent independently is C₁₋₄alkyl, C₁₋₄alkoxy, C₂₋₄alkynyl, trifluoromethyl, hydroxy, hydroxyC₁₋₄alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀₋₄alkyl)(C₀₋₄alkyl), nitro, (C₁₋₂alkyl)(C₁₋₂alkyl)NCH₂-, (C₁₋₂alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 4(previously presented): The compound according to Claim 2, or a pharmaceutically acceptable salt thereof, wherein

HetAr is an isoxazolyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁₋₄alkyl, C₁₋₄alkoxy, C₂₋₄alkynyl, trifluoromethyl, hydroxy, hydroxyC₁₋₄alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀₋₄alkyl)(C₀₋₄alkyl), nitro, (C₁₋₂alkyl)(C₁₋₂alkyl)NCH₂-, (C₁₋₂alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 5(previously presented): The compound according to Claim 2, or a pharmaceutically acceptable salt thereof, wherein

Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 5

HetAr is a thiadiazolyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 6(previously presented): The compound according to Claim 2, or a pharmaceutically acceptable salt thereof, wherein

HetAr is a 5 membered heteroaromatic ring containing 2 nitrogen ring atoms;

HetAr is optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 7(previously presented): The compound according to Claim 2, or a pharmaceutically acceptable salt thereof, wherein

HetAr is quinolinyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 8(previously presented): The compound according to Claim 2, or a pharmaceutically acceptable salt thereof, wherein

HetAr is purinyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 6

Claim 9(previously presented): The compound according to Claim 2, or a pharmaceutically acceptable salt thereof, wherein

HetAr is a 6 membered heteroaromatic ring containing 2 nitrogen ring atoms;

HetAr is optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 10(previously presented): The compound according to Claim 2, or a pharmaceutically acceptable salt thereof, wherein

HetAr is thiazolyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 11(previously presented): The compound according to Claim 2, or a pharmaceutically acceptable salt thereof, wherein

HetAr is pteridinyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 12(previously presented): The compound according to Claim 2, or a pharmaceutically acceptable salt thereof, wherein

HetAr is pyrrolopyrimidinyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 7

Claim 13 (previously presented): The compound according to Claim 2, or a pharmaceutically acceptable salt thereof, wherein

HetAr is a imidazopyridinyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 14 (previously presented): The compound according to Claim 2, or a pharmaceutically acceptable salt thereof, wherein

HetAr is benzimidazolyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 15 (previously presented): The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein

NonAr is a nonaromatic 6 membered ring containing 1 nitrogen ring atom; and B is aryl(CH₂)₁₋₃-SO₂-, wherein the aryl is optionally substituted by 1-5 substituents, each substituent independently is C₁-4alkyl, C₃-6cycloalkyl, C₁-4alkoxy, trifluoromethyl, bromo, fluoro, or chloro.

Claim 16 (previously presented): The compound according to Claim 15, or a pharmaceutically acceptable salt thereof, wherein

HetAr is a 6 membered heteroaromatic ring containing 2 nitrogen ring atoms; HetAr is optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 8

Claim 17 (previously presented): The compound according to Claim 15, or a pharmaceutically acceptable salt thereof, wherein

HetAr is quinazolinyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 18 (previously presented): The compound according to Claim 15, or a pharmaceutically acceptable salt thereof, wherein

HetAr is purinyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 19 (previously presented): The compound according to Claim 15, or a pharmaceutically acceptable salt thereof, wherein

HetAr is imidazopyridinyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 20 (previously presented): The compound according to Claim 15, or a pharmaceutically acceptable salt thereof, wherein

HetAr is a 6 membered heteroaromatic ring containing 1 nitrogen ring atom; and

HetAr is optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-,

Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 9

heteroarylethynyl-, -N(C₀₋₄alkyl)(C₀₋₄alkyl), nitro, (C₁₋₂alkyl)(C₁₋₂alkyl)NCH₂-, (C₁₋₂alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 21(withdrawn): The compound according to Claim 1, or pharmaceutically acceptable salts thereof, wherein

NonAr is a nonaromatic 5 membered ring containing 1 nitrogen ring atom; and B is aryl(CH₂)₀₋₃-O-C(O)-, wherein the aryl is optionally substituted by 1-5 substituents, each substituent independently is C₁₋₄alkyl, C₃₋₆cycloalkyl, C₁₋₄alkoxy, trifluoromethyl, bromo, fluoro, or chloro.

Claim 22(withdrawn): The compound according to Claim 21, or pharmaceutically acceptable salts thereof, wherein

HetAr is a 6 membered heteroaromatic ring containing 2 nitrogen ring atoms;

HetAr is optionally substituted with 1 or 2 substituents, each substituent independently is C₁₋₄alkyl, C₁₋₄alkoxy, C₂₋₄alkynyl, trifluoromethyl, hydroxy, hydroxyC₁₋₄alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀₋₄alkyl)(C₀₋₄alkyl), nitro, (C₁₋₂alkyl)(C₁₋₂alkyl)NCH₂-, (C₁₋₂alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 23(withdrawn): The compound according to Claim 21, or pharmaceutically acceptable salts thereof, wherein

HetAr is pteridinyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁₋₄alkyl, C₁₋₄alkoxy, C₂₋₄alkynyl, trifluoromethyl, hydroxy, hydroxyC₁₋₄alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀₋₄alkyl)(C₀₋₄alkyl), nitro, (C₁₋₂alkyl)(C₁₋₂alkyl)NCH₂-, (C₁₋₂alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 24(withdrawn): The compound according to Claim 21, or pharmaceutically acceptable salts thereof, wherein

HetAr is purinyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁₋₄alkyl, C₁₋₄alkoxy, C₂₋₄alkynyl, trifluoromethyl, hydroxy, hydroxyC₁₋₄alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-,

Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 10

heteroarylethynyl-, -N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 25(withdrawn): The compound according to Claim 21, or pharmaceutically acceptable salts thereof, wherein

HetAr is benzimidazolyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 26(withdrawn): The compound according to Claim 1, or pharmaceutically acceptable salts thereof, wherein

NonAr is an aza bicyclo octane ring; and

B is aryl(CH₂)₀₋₃-O-C(O)-, wherein the aryl is optionally substituted by 1-5 substituents, each substituent independently is C₁-4alkyl, C₃-6cycloalkyl, C₁-4alkoxy, trifluoromethyl, bromo, fluoro, or chloro.

Claim 27(withdrawn): The compound according to Claim 26, or pharmaceutically acceptable salts thereof, wherein

HetAr is a 6 membered heteroaromatic ring containing 1 nitrogen ring atom; and

HetAr is optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 28(withdrawn): The compound according to Claim 26, or pharmaceutically acceptable salts thereof, wherein

HetAr is purinyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-,

Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 11

heteroarylethynyl-, -N(C₀₋₄alkyl)(C₀₋₄alkyl), nitro, (C₁₋₂alkyl)(C₁₋₂alkyl)NCH₂-, (C₁₋₂alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 29(withdrawn): The compound according to Claim 26, or pharmaceutically acceptable salts thereof, wherein

HetAr is a 6 membered heteroaromatic ring containing 2 nitrogen ring atom; and

HetAr is optionally substituted with 1 or 2 substituents, each substituent independently is C₁₋₄alkyl, C₁₋₄alkoxy, C₂₋₄alkynyl, trifluoromethyl, hydroxy, hydroxyC₁₋₄alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀₋₄alkyl)(C₀₋₄alkyl), nitro, (C₁₋₂alkyl)(C₁₋₂alkyl)NCH₂-, (C₁₋₂alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 30(withdrawn): The compound according to Claim 1, or pharmaceutically acceptable salts thereof, wherein

NonAr is an aza bicyclo octane ring; and

B is aryl(CH₂)₁₋₃-SO₂-, wherein the aryl is optionally substituted by 1-5 substituents, each substituent independently is C₁₋₄alkyl, C₃₋₆cycloalkyl, C₁₋₄alkoxy, trifluoromethyl, bromo, fluoro, or chloro.

Claim 31(previously presented): The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein

NonAr is a nonaromatic 6 membered ring containing 1 nitrogen ring atom; and

B is heteroaryl(CH₂)₁₋₃-C(O)-, wherein the heteroaryl is optionally substituted by 1-5 substituents, each substituent independently is C₁₋₄alkyl, C₃₋₆cycloalkyl, C₁₋₄alkoxy, trifluoromethyl, bromo, fluoro, or chloro.

Claim 32(previously presented): The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein

NonAr is a nonaromatic 6 membered ring containing 1 nitrogen ring atom; and

B is aryl(CH₂)₁₋₃-C(O)-, wherein the aryl is optionally substituted by 1-5 substituents, each substituent independently is C₁₋₄alkyl, C₃₋₆cycloalkyl, C₁₋₄alkoxy, trifluoromethyl, bromo, fluoro, or chloro.

Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 12

Claim 33(previously presented): The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein

NonAr is a nonaromatic 6 membered ring containing 1 nitrogen ring atom; and B is aryl-cyclopropyl-C(O)-, wherein the aryl is optionally substituted by 1-5 substituents, each substituent independently is C₁-4alkyl, C₃-6cycloalkyl, C₁-4alkoxy, trifluoromethyl, bromo, fluoro, or chloro.

Claim 34(previously presented): The compound according to Claim 33, or a pharmaceutically acceptable salt thereof, wherein

HetAr is pyridyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 35(previously presented): The compound according to Claim 33, or a pharmaceutically acceptable salt thereof, wherein

HetAr is pyrazinyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Claim 36(previously presented): The compound according to Claim 33, or a pharmaceutically acceptable salt thereof, wherein

HetAr is pyridazinyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁-4alkyl, C₁-4alkoxy, C₂-4alkynyl, trifluoromethyl, hydroxy, hydroxyC₁-4alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀-4alkyl)(C₀-4alkyl), nitro, (C₁-2alkyl)(C₁-2alkyl)NCH₂-, (C₁-2alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

Serial No.: 10/079,452
 Case No.: 20832Y
 Page No.: 13

Claim 37(previously presented): The compound according to Claim 33, or a pharmaceutically acceptable salt thereof, wherein

HetAr is pyrimidinyl optionally substituted with 1 or 2 substituents, each substituent independently is C₁₋₄alkyl, C₁₋₄alkoxy, C₂₋₄alkynyl, trifluoromethyl, hydroxy, hydroxyC₁₋₄alkyl, fluoro, chloro, bromo, iodo, cyano, methylsulfanyl, cyclopropylethynyl-, phenylethynyl-, heteroarylethynyl-, -N(C₀₋₄alkyl)(C₀₋₄alkyl), nitro, (C₁₋₂alkyl)(C₁₋₂alkyl)NCH₂-, (C₁₋₂alkyl)HNCH₂-, Si(CH₃)₃-C-, or NH₂C(O)-.

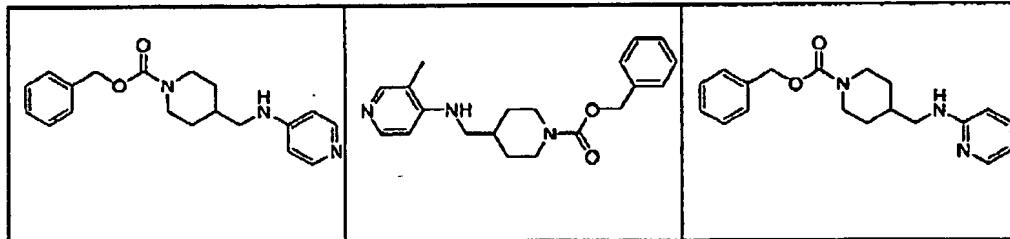
Claim 38(previously presented): The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein

NonAr is a nonaromatic 6 membered ring containing 1 nitrogen ring atom; and B is heteroaryl(CH₂)₁₋₅-O-C(O)-, wherein the heteroaryl is optionally substituted by 1-5 substituents, each substituent independently is C₁₋₄alkyl, C₃₋₆cycloalkyl, C₁₋₄alkoxy, trifluoromethyl, bromo, fluoro, or chloro;.

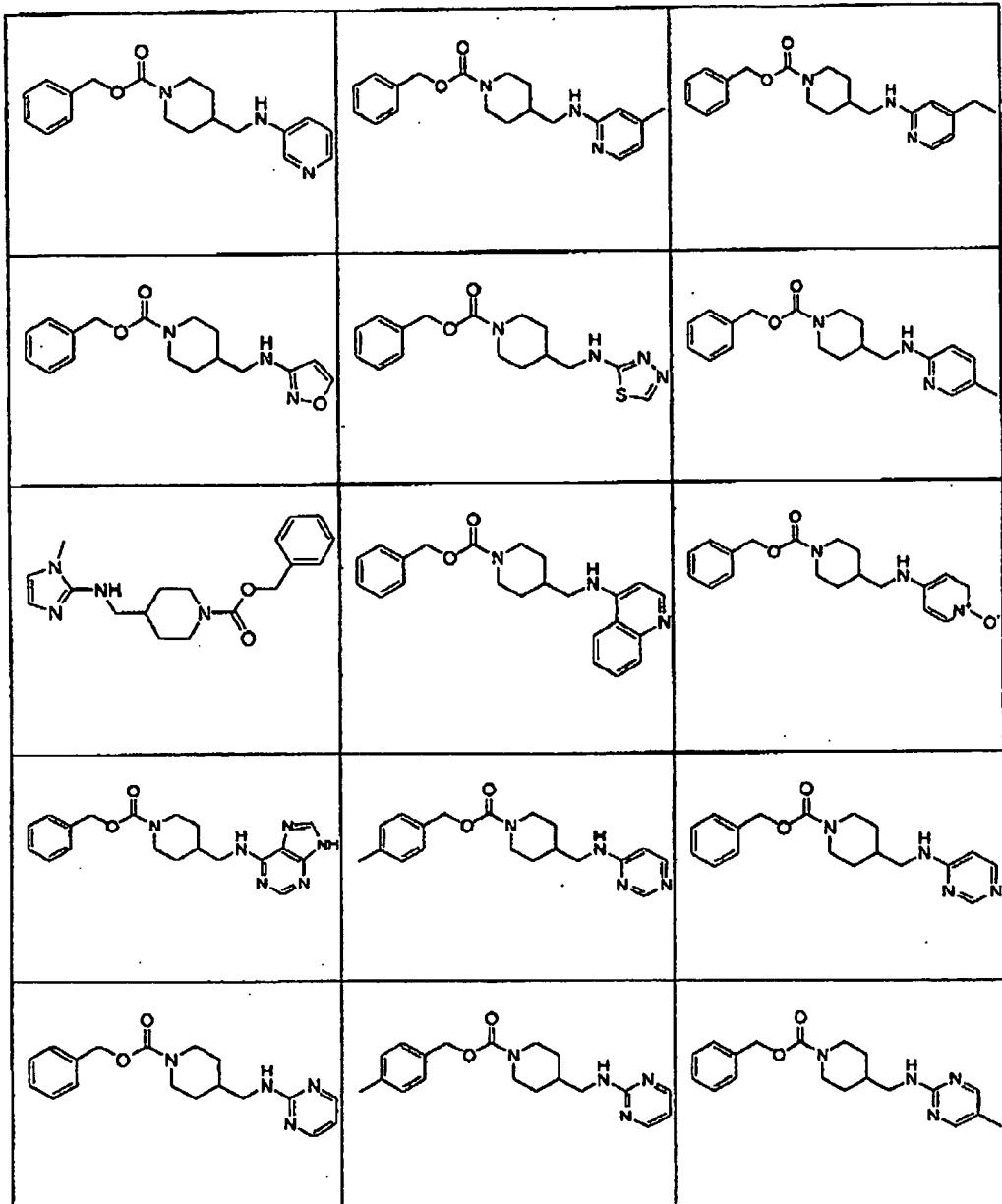
Claim 39(previously presented): The compound according to Claim 1, or a pharmaceutically acceptable salt thereof, wherein

NonAr is a nonaromatic 6 membered ring containing 1 nitrogen ring atom; and B is aryl(CH₂)₁₋₃-NH-C(NCN)-, wherein the aryl is optionally substituted by 1-5 substituents, each substituent independently is C₁₋₄alkyl, C₃₋₆cycloalkyl, C₁₋₄alkoxy, trifluoromethyl, bromo, fluoro, or chloro.

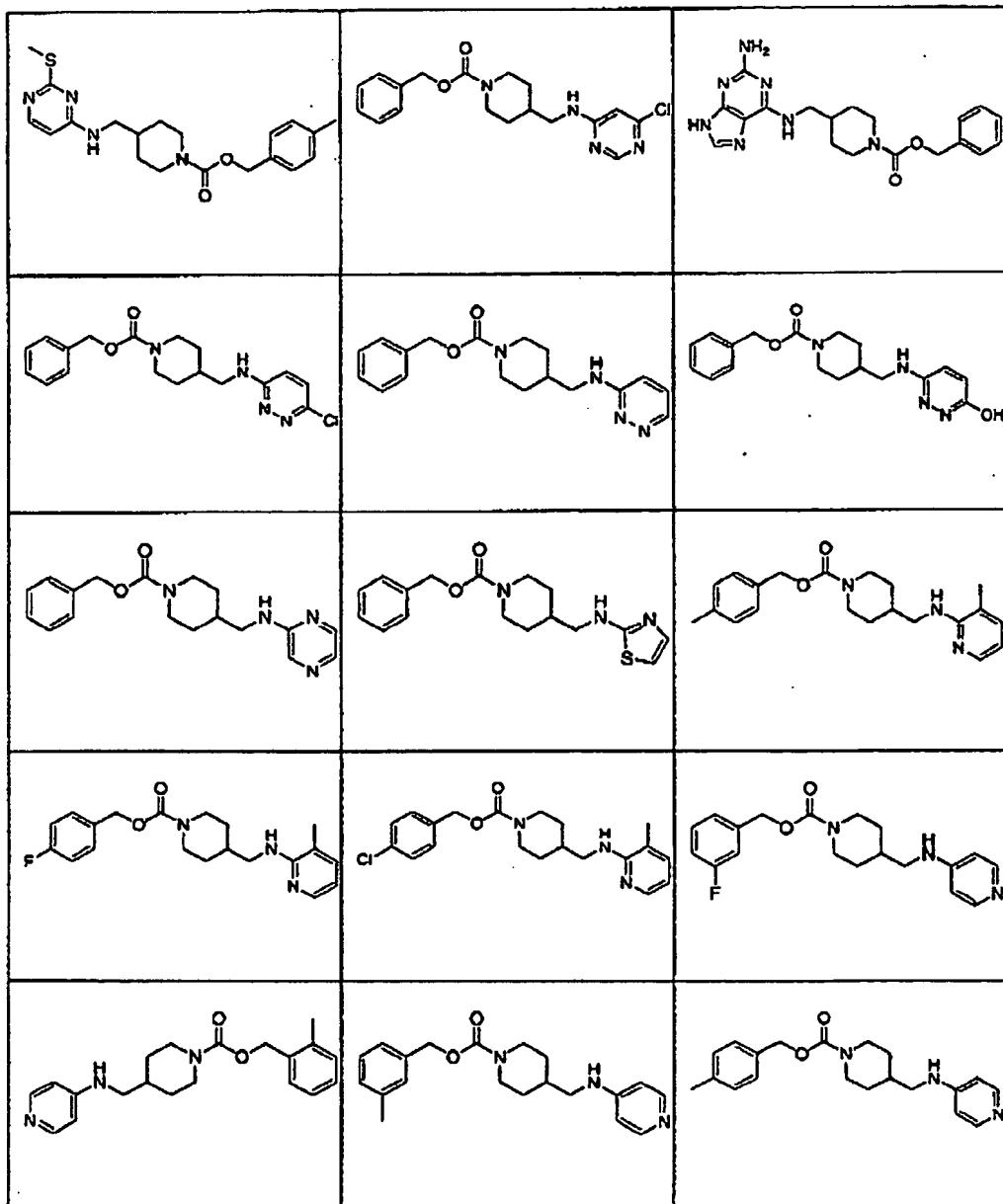
Claim 40(original): The compound according to Claim 1, wherein said compound is



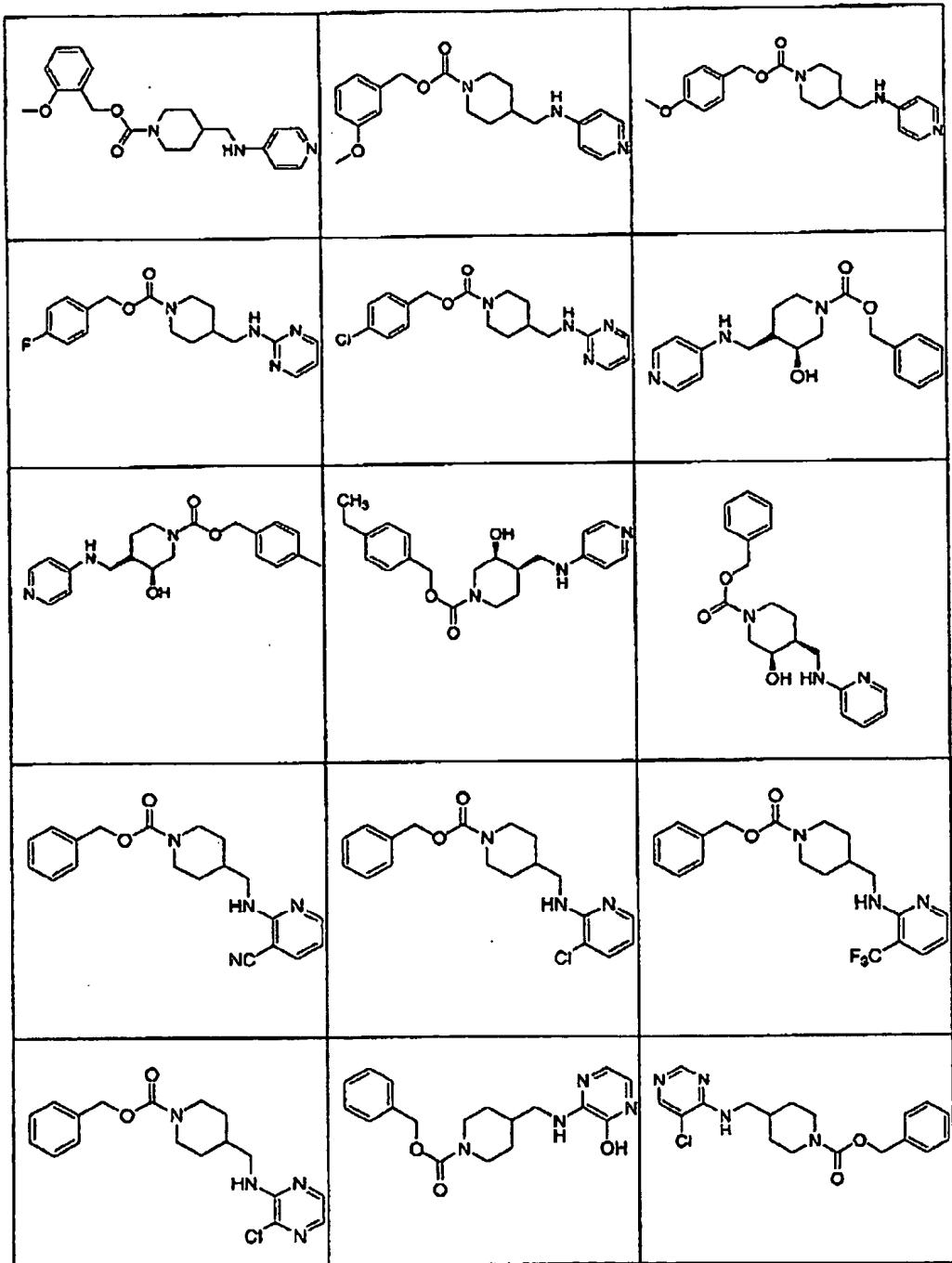
Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 14



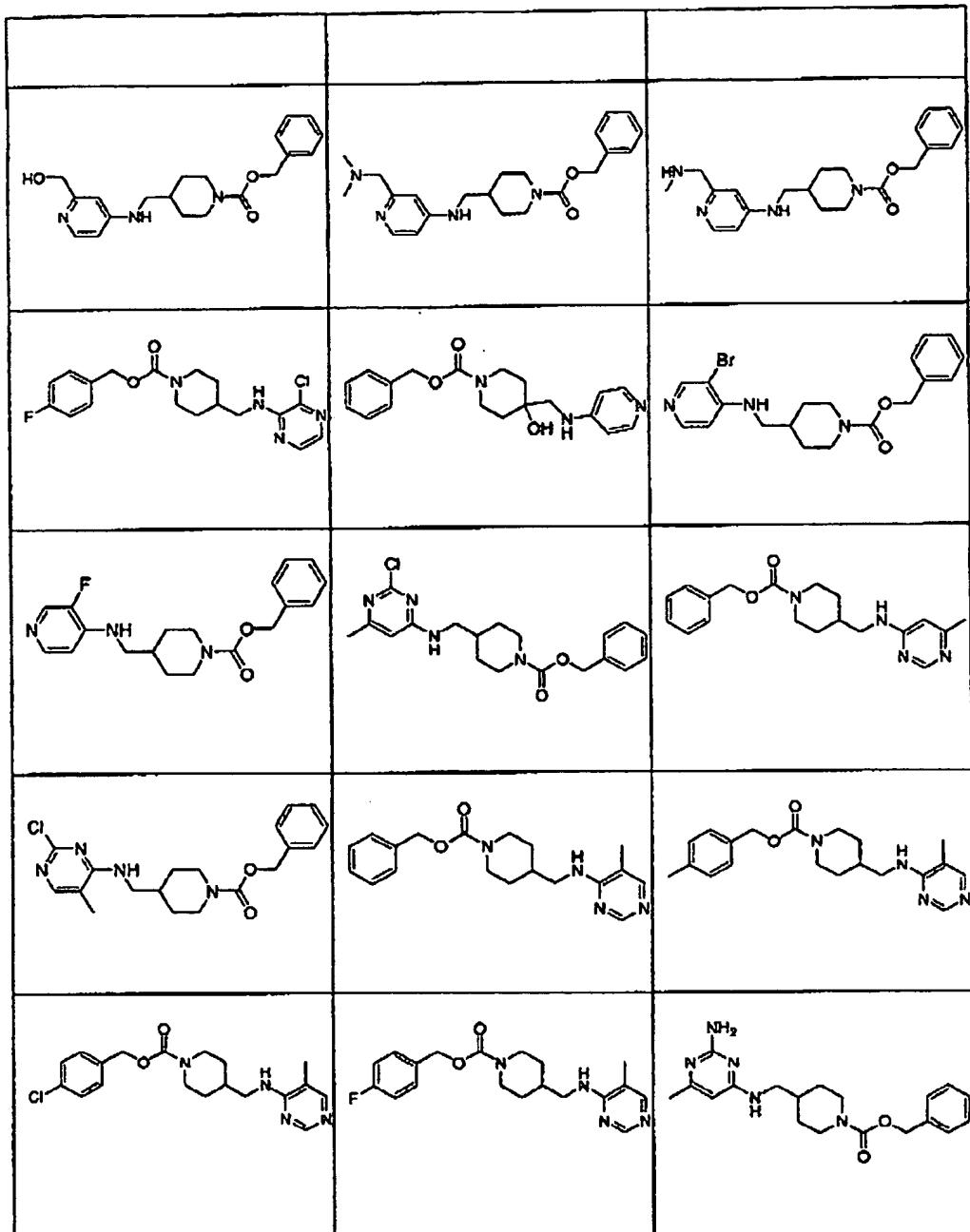
Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 15



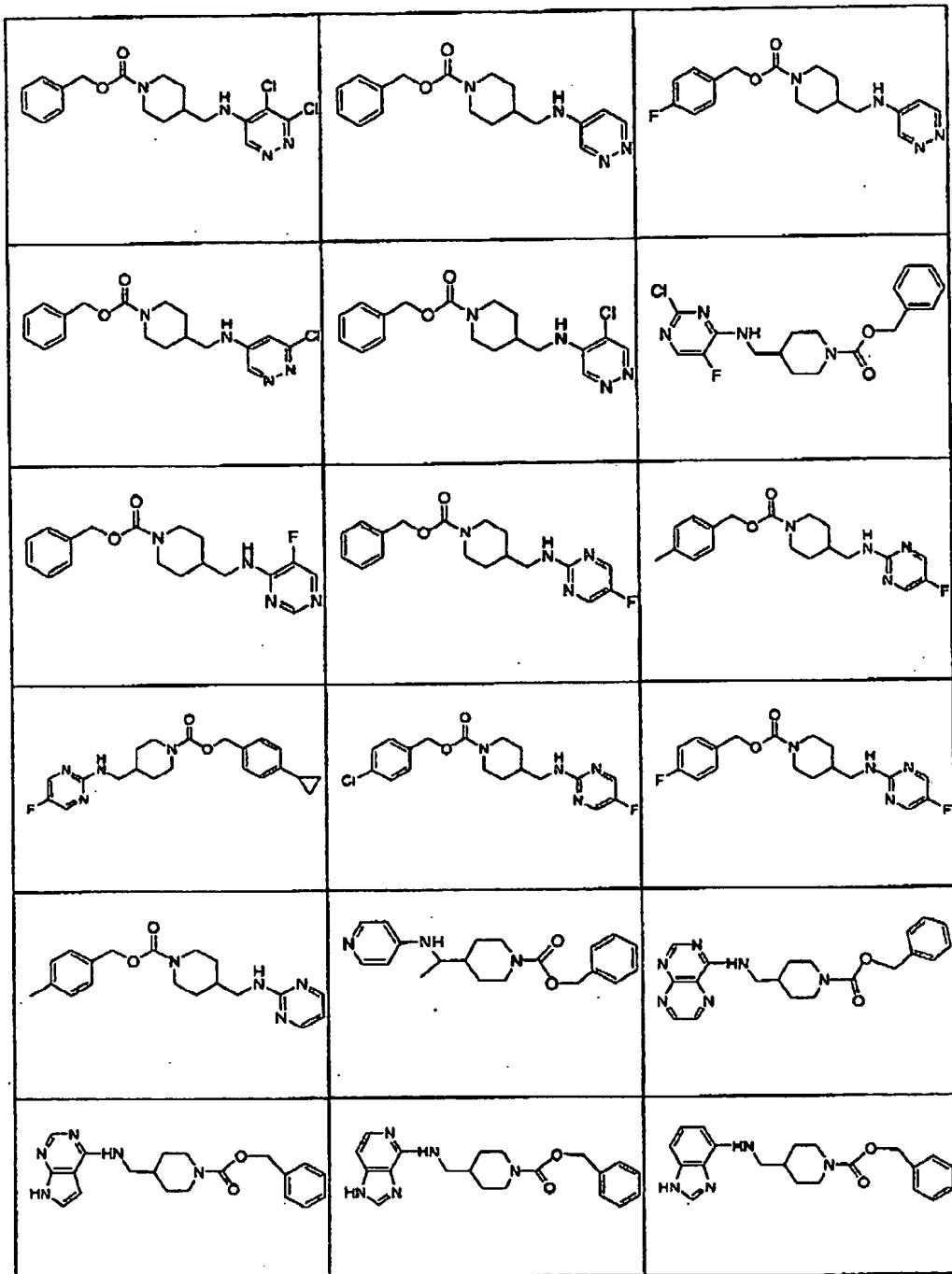
Serial No.: 10/079,452
Case No.: 20832.Y
Page No.: 16



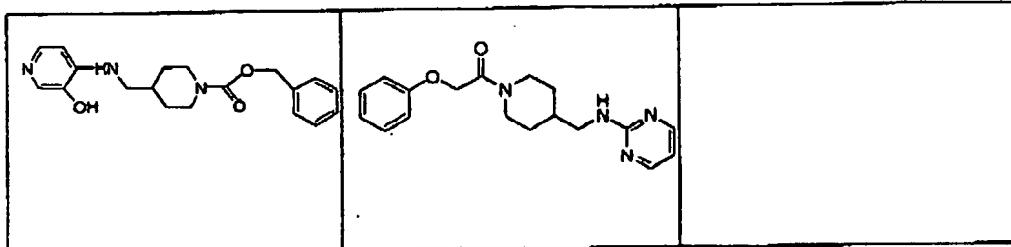
Serial No.: 10/079,452
 Case No.: 20832Y
 Page No.: 17



Serial No.: 10/079,452
 Case No.: 20832Y
 Page No.: 18

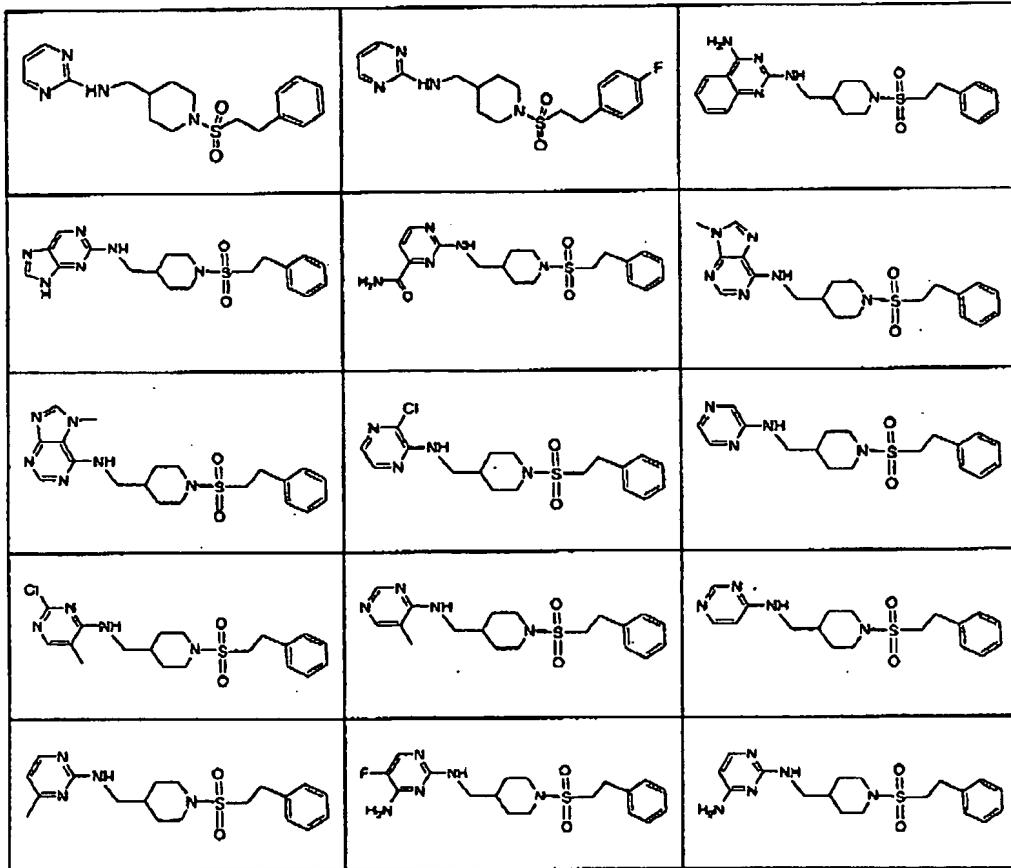


Serial No.: 10/079,452
 Case No.: 20832Y
 Page No.: 19

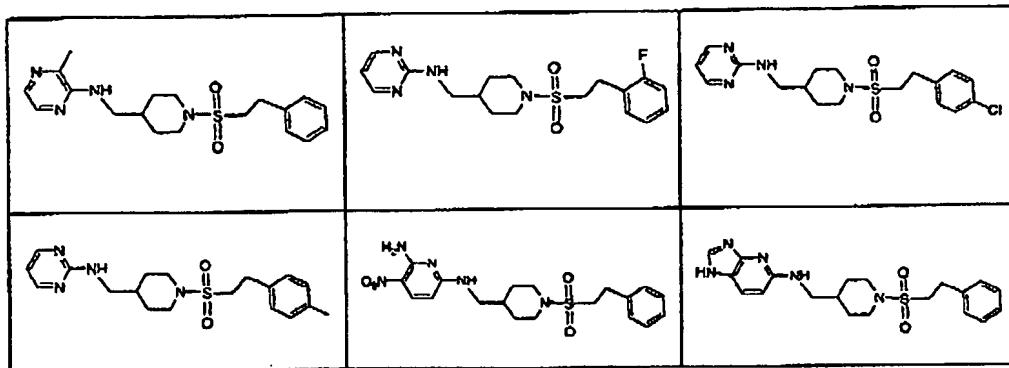


or a pharmaceutically acceptable salt thereof.

Claim 41(original): The compound according to Claim 1, wherein said compound is

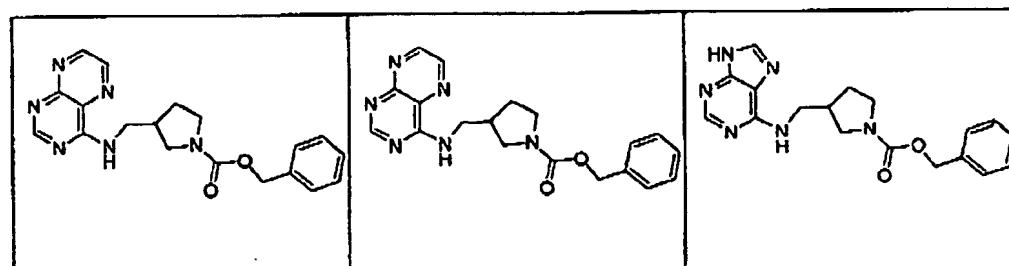


Serial No.: 10/079,452
 Case No.: 20832Y
 Page No.: 20



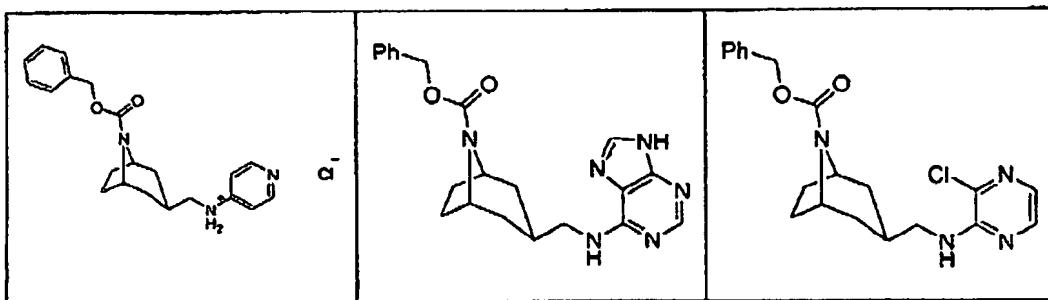
or a pharmaceutically acceptable salt thereof.

Claim 42(withdrawn): The compound according to Claim 1, wherein said compound is

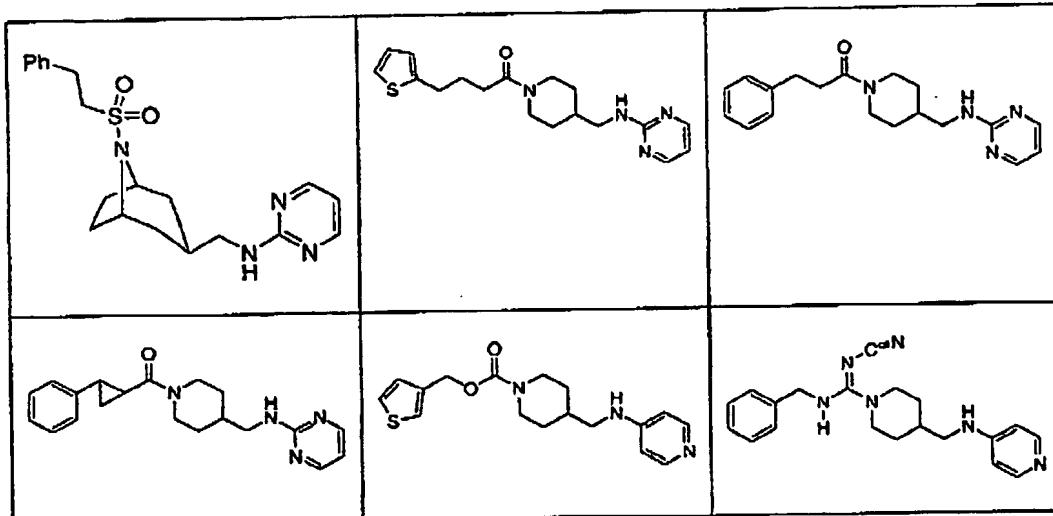


or a pharmaceutically acceptable salt thereof.

Claim 43(original): The compound according to Claim 1, wherein said compound is

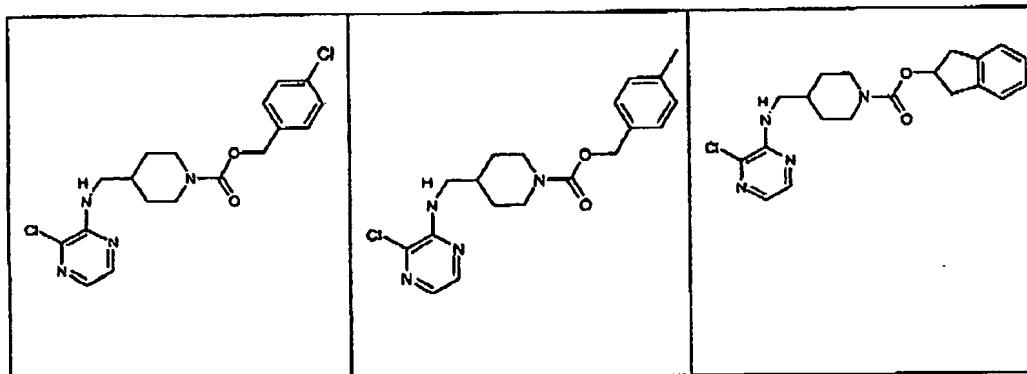


Serial No.: 10/079,452
 Case No.: 20832Y
 Page No.: 21

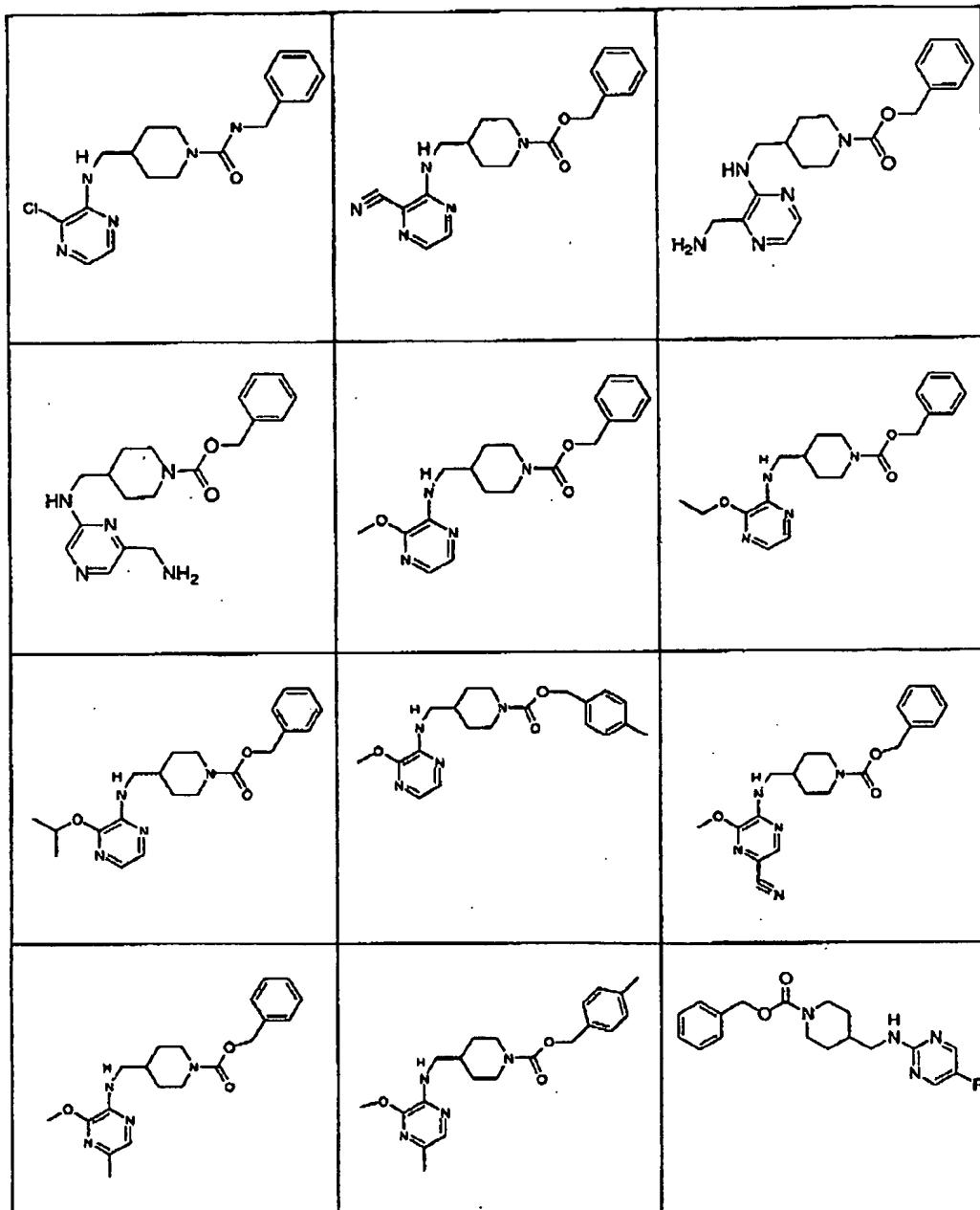


or a pharmaceutically acceptable salt thereof.

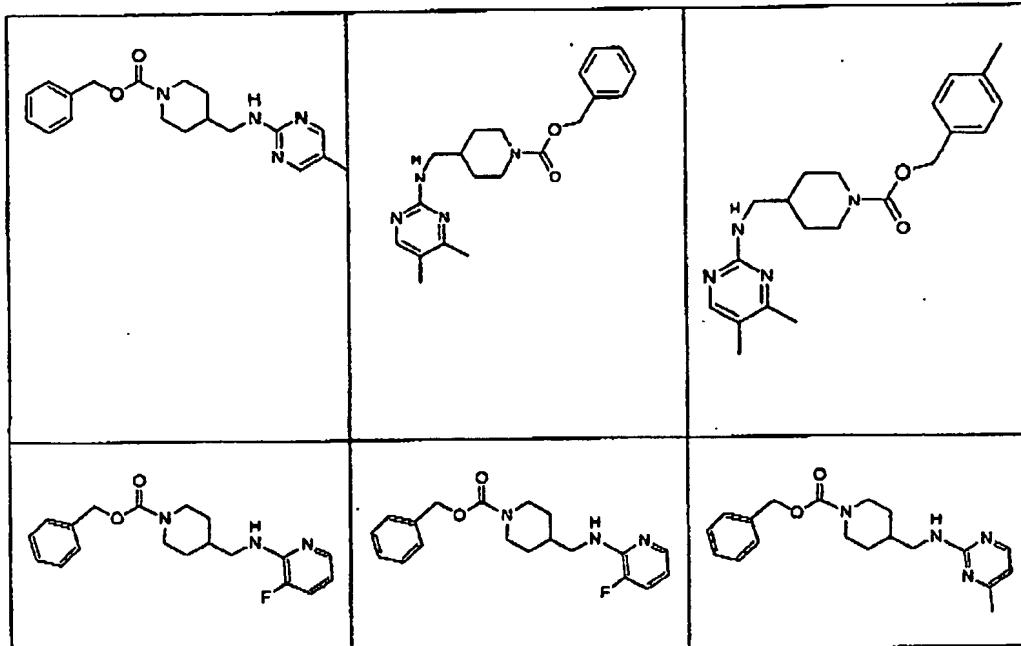
Claim 44(previously presented): The compound according to Claim 1, wherein said compound is



Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 22

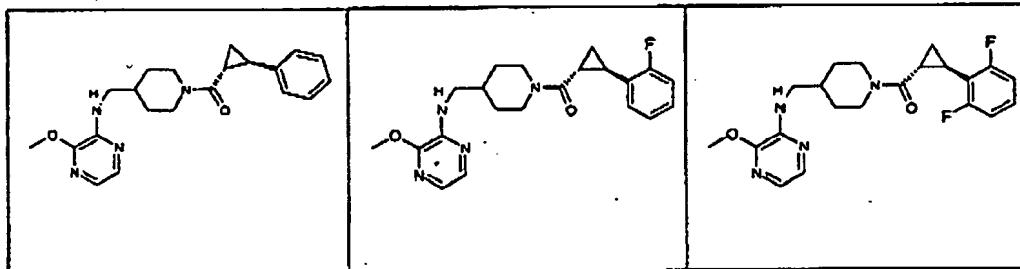


Serial No.: 10/079,452
 Case No.: 20832Y
 Page No.: 23

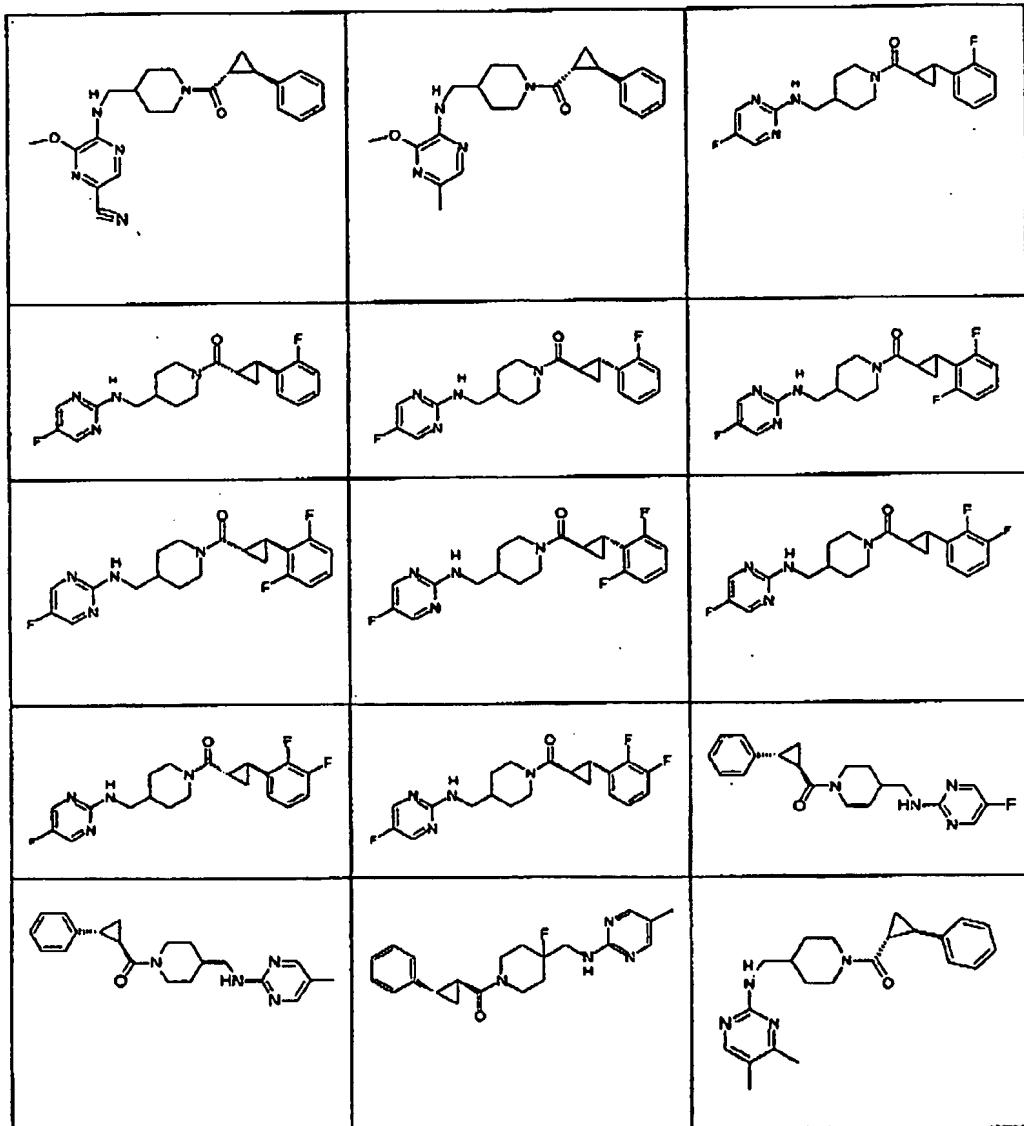


or a pharmaceutically acceptable salt thereof.

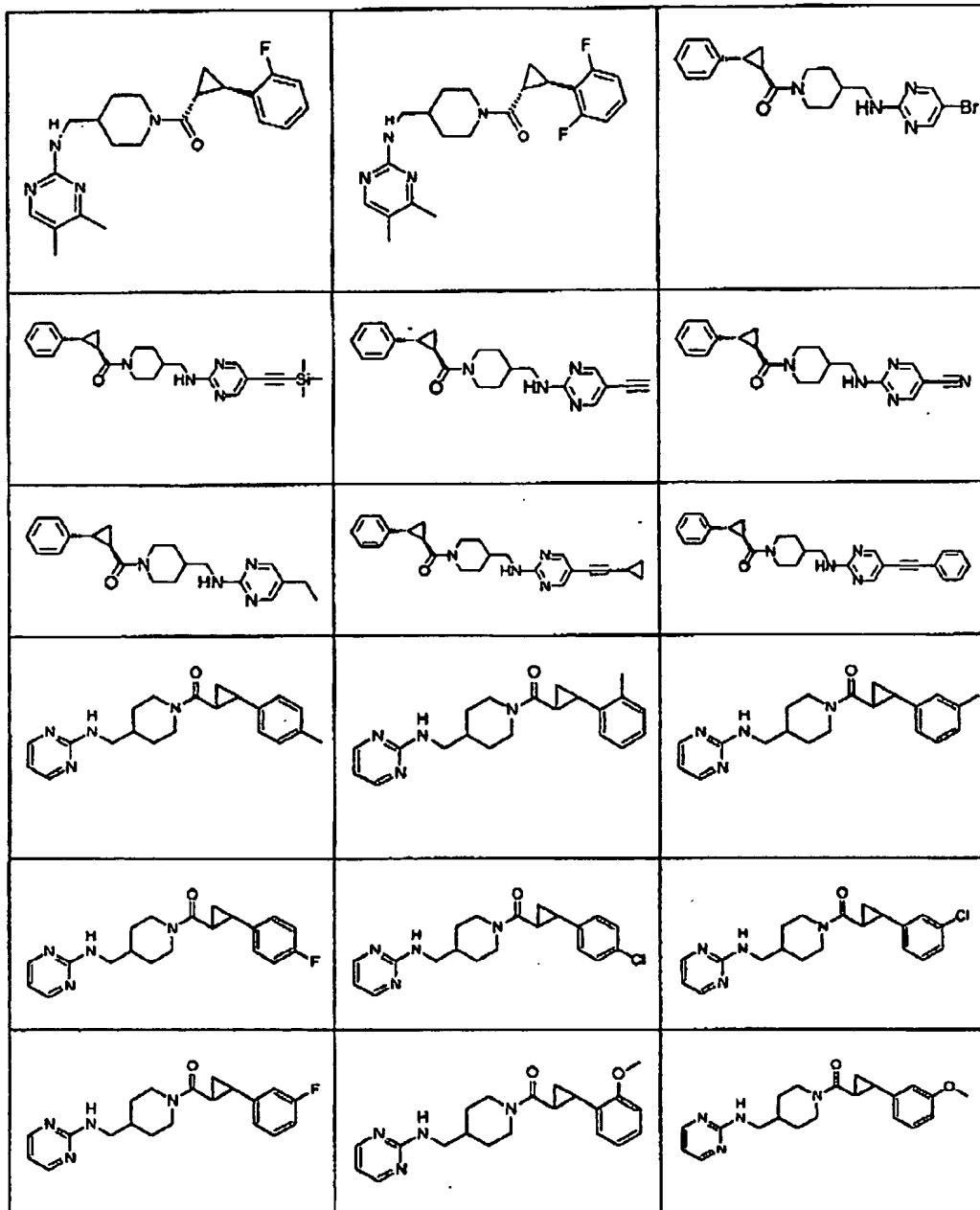
Claim 45(previously presented): The compound according to Claim 1, wherein said compound is



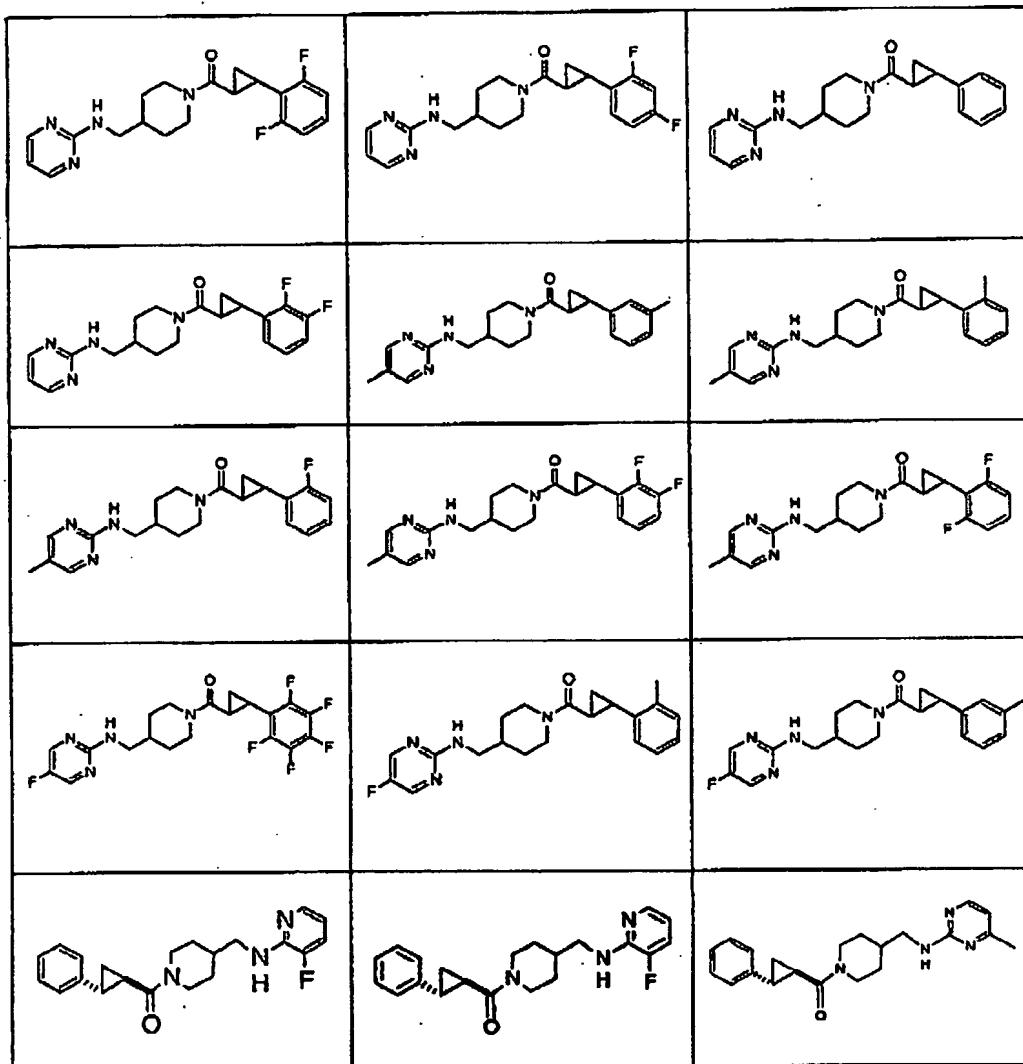
Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 24



Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 25



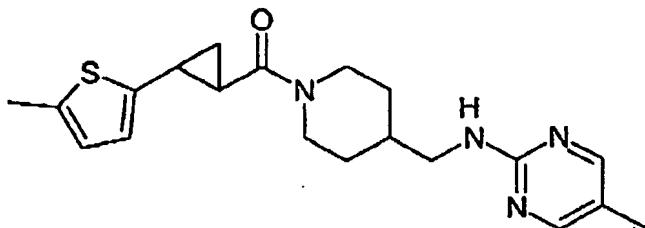
Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 26



or a pharmaceutically acceptable salt thereof.

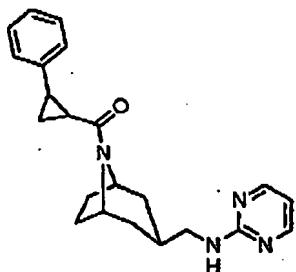
Claim 46 (previously presented): The compound according to Claim 1, wherein said compound is

Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 27



or a pharmaceutically acceptable salt thereof.

Claim 47(withdrawn): The compound according to Claim 1, wherein said compound is



or a pharmaceutically acceptable salt thereof.

Claim 48(original): A pharmaceutical composition comprising an inert carrier and an effective amount of a compound according to claim 1.

Claim 49(previously presented): A pharmaceutical composition comprising an inert carrier and an amount of a compound according to claim 1 effective to treat pain.

Claim 50(previously presented): A pharmaceutical composition comprising an inert carrier and an amount of a compound according to claim 1 effective to treat migraine, depression, anxiety, schizophrenia, Parkinson's disease, or stroke.

Claim 51(original): A method of treating pain comprising a step of administering to one in need of such treatment an effective amount of a compound according to claim 1.

Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 28

Claim 52(original): A method of treating migraine, depression, anxiety, schizophrenia, Parkinson's disease, or stroke comprising a step of administering to one in need of such treatment an effective amount of a compound according to claim 1.

Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 29

REMARKS

Claims 1-52 are presently pending. Favorable reconsideration and allowance of this application, as amended and responded to herein, is respectfully requested.

Election of Group

Examiner states “[b]ecause applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated without traverse.” It is respectfully pointed out that in the Response dated October 3, 2003, Applicants stated “[a]pplicants affirm the provisional election, with traverse, made during a telephone conversation with Examiner Rao on May 6, 2003.” Applicants thus respectfully request the record to indicate that the election be treated with traverse.

Amendment to Specification

The instant specification has been amended simply to bring it into conformity with the claims as originally filed. “The claims as filed in the original specification are part of the disclosure and, therefore, if an application as originally filed contains a claim disclosing material not found in the remainder of the specification, the applicant may amend the specification to include the claimed subject matter.” MPEP § 2163, citing *In re Benno*, 768 F.2d 1340 (Fed. Cir. 1985). Since instant Claim 22 as originally filed contains the subject matter added herein to the specification, no new matter is added by this amendment to the specification.

Serial No.: 10/079,452
Case No.: 20832Y
Page No.: 30

The 35 U.S.C. § 102 Rejection

Claims 1, 9, and 48-52 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Van Lommen et al., WO 93/17017. The Examiner states that "the instantly claimed compounds read on the compounds of the reference." The Examiner specifically points to reference disclosed compounds in Table 1, pages 45-49, particularly compounds 38-43.

Claim 1 has been amended to exclude compounds where B is aryl(CH₂)₁₋₃, or heteroaryl(CH₂)₁₋₃. Applicants respectfully submit that the instant claims, as amended herein, are not anticipated by the cited reference. Applicants thus deem this rejection obviated and respectfully request withdrawal thereof.

In view of the foregoing amendments and remarks it is firmly believed that the subject invention is in condition for allowance, which action is earnestly solicited.

Respectfully submitted,

By: 

Mitul I. Desai
Reg. No. 46,661
Attorney for Applicants

Merck & Co., Inc.
P.O. Box 2000
Rahway, NJ 07065-0907
(732) 594-3190

Date: April 29, 2004